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* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] The 1st generation section which is the migration (→ portable) terminal unit which has the function which displays a photography candidate's image, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation section which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, The migration terminal unit characterized by having the main display which is prepared in said main actuation side side, corresponds to said 1st image data, corresponds to the 1st image of the right-and-left contrary for photography, and said 2nd image data, and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's image.
[Claim 2] It is the migration terminal unit according to claim 1 carried out [that said migration terminal unit is further equipped with the photography directions receptionist section which receives the photography directions from an operator, and a record means to complete photography by recording both said 1st image data and said 2nd image data without carrying out reversely / right-and-left / for photography if said photography directions are received, and] as the description.
[Claim 3] Said migration terminal unit is a migration terminal unit according to claim 1 characterized by having the subdisplay which is prepared in said tooth-back side, corresponds to said 2nd image data further, and displays the 3rd image of the right-and-left contrary for photography.
[Claim 4] Said migration terminal unit is a closing motion type, and a closed state and an open condition exist. Said main actuation side It is concealed in a closed state and exposes in an open condition. Said tooth back It exposes irrespective of a closed state and an open condition. Said migration terminal unit Furthermore, the preparation directions receptionist section which receives directions of the photography preparation from an operator, If directions of said photography preparation are received, it will have a detection means to detect whether it is a closed state or it is in an open condition. Said 1st generation section When it is detected that it is a closed state, said 1st image data is not generated, but when it is detected that it is in an open condition, said 1st image data is generated. Said 2nd generation section If directions of said photography preparation are received, said 2nd image data will be generated irrespective of a closed state and an open condition. Said main display When it is detected that it is a closed state, a photography candidate's image is not displayed, but when it is detected that it is in an open condition, both said 1st image and said 2nd image are displayed. Said migration terminal unit Furthermore, the migration terminal unit according to claim 1 characterized by having the subdisplay which is prepared in said tooth-back side, corresponds to said 2nd image data when it is detected that it is a closed state, and displays the 3rd image of the right-and-left contrary for photography.
[Claim 5] The photography directions receptionist section in which said migration terminal unit receives the photography directions from an operator further after directions of said photography preparation are made, It records without setting said 2nd image data reversely [right-and-left] as for photography, when said photography directions were received and it is detected that it is a closed state. The migration terminal unit according to claim 4 characterized by having a record means to complete photography by recording without carrying out both said 1st image data and said 2nd image data reversely [right-and-left] for photography, when it is detected that it is in an open condition.
[Claim 6] Said subdisplay is a migration terminal unit according to claim 4 characterized by displaying said 3rd image irrespective of an open condition and an open condition, when directions of said photography preparation are received.
[Claim 7] The 1st generation step which is the method of presentation which displays a surrounding photography candidate's image in a migration terminal unit, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation step which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, It corresponds to the main display prepared in said main actuation side side at said 1st image data. The 1st image of the right-and-left contrary for photography, And the method of presentation characterized by including the main display step which corresponds to said 2nd image data and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's

image.
[Claim 8] While the main display and the 1st camera are formed in the main actuation side side, the 2nd camera is formed in the tooth-back side of the main actuation side, and the image under photography is set with said 1st camera and said 2nd camera to the migration terminal unit which can be displayed on said main display. The control means which controls the display of said image is provided. Said control means The migration terminal unit which is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence when directions of the coincidence photography with said 1st camera and said 2nd camera are received.
[Claim 9] It is the migration terminal unit characterized by expressing said 2nd image to said subdisplay as a mirror image when a subdisplay is provided in said tooth-back side and said control means shows said 1st image and said 2nd image to said main display in a migration terminal unit according to claim 8 at coincidence.
[Claim 10] In a migration terminal unit according to claim 8 or 9, the storage section which memorizes the image data of said image is provided. Said control means The migration terminal unit characterized by memorizing the 3rd image data which compounds said 1st image and said 2nd image, and is obtained in said storage section when said 1st image and said 2nd image are being displayed on said main display at coincidence and image data storage directions are received.
[Claim 11] It is the migration terminal unit characterized by for said control means using as a non-mirror image said 1st image currently displayed by the mirror image when compounding said 1st image and said 2nd image in a migration terminal unit according to claim 10, and compounding.
[Claim 12] It is the migration terminal unit characterized by displaying the 3rd image which said control means compounded said 1st image and said 2nd image in the migration terminal unit according to claim 10 or 11 before memorizing said 3rd image data in said storage section, and was obtained on said main display.
[Claim 13] It is the migration terminal unit characterized by what is displayed in the condition which can be edited when said control means displays said 3rd image on said main display in a migration terminal unit according to claim 12.
[Claim 14] It is the migration terminal unit characterized by displaying separately said 1st image and said 2nd image selectable when displaying said control means in the condition that said 3rd image can be edited, in a migration terminal unit according to claim 13.
[Claim 15] It is the migration terminal unit characterized by choosing separately said 1st image and said 2nd image, and displaying them possible when displaying said control means in the condition that said 3rd image can be edited, in a migration terminal unit according to claim 14.
[Claim 16] While the main display and the 1st camera are formed in the main actuation side side, the 2nd camera is formed in the tooth-back side of the main actuation side, and the image under photography is set with said 1st camera and said 2nd camera to the display-control approach of the migration terminal unit which can be displayed on said main display. The control step which controls the display of said image is included. Said control step The display-control approach which is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence when directions of the coincidence photography with said 1st camera and said 2nd camera are received.
[Claim 17] It is the display-control approach characterized by what is displayed on the subdisplay which possesses said 2nd image in the tooth-back side of said migration terminal unit by the mirror image when said control step shows said 1st image and said 2nd image to said main display in the display-control approach according to claim 16 at coincidence.
[Claim 18] It is the display-control approach characterized by memorizing the 3rd image data which said control step compounds said 1st image and said 2nd image in the display-control approach according to claim 16 or 17 when said 1st image and said 2nd image are displayed on said main display at coincidence and image data storage directions are received, and is obtained in the storage section.
[Claim 19] It is the display-control approach characterized by for said control step using as a non-mirror image said 1st image currently displayed by the mirror image when compounding said 1st image and said 2nd image in the display-control approach according to claim 18, and compounding.
[Claim 20] It is the display-control approach characterized by displaying the 3rd image which said control step compounded said 1st image and said 2nd image in the display-control approach according to claim 18 or 19 before memorizing said 3rd image data in said storage section, and was obtained on said main display.
[Claim 21] It is the program which makes a migration terminal unit perform display-control procedure. Said migration terminal unit While the main display and the 1st camera are formed in the main actuation side side, the 2nd camera is formed in the tooth-back side of the main actuation side. The image under photography can be expressed to said main display as said 1st camera and said 2nd camera. Said display-control procedure The control procedure which controls

the display of said image is included. Said control procedure The program which is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence when directions of the coincidence photography with said 1st camera and said 2nd camera are received.

[Claim 22] It is the program characterized by what is displayed on the subdisplay which possesses said 2nd image in the tooth-back side of said migration terminal unit by the mirror image when said control procedure shows said 1st image and said 2nd image to said main display in a program according to claim 21 at coincidence.

[Claim 23] It is the program characterized by memorizing the 3rd image data which said control procedure compounds said 1st image and said 2nd image in a program according to claim 21 or 22 when said 1st image and said 2nd image are displayed on said main display at coincidence and image data storage directions are received, and is obtained in the storage section.

[Claim 24] It is the program characterized by for said control procedure using as a non-mirror image said 1st image currently displayed by the mirror image when compounding said 1st image and said 2nd image in a program according to claim 23, and compounding.

[Claim 25] It is the program characterized by displaying the 3rd image which said control procedure compounded said 1st image and said 2nd image in the program according to claim 23 or 24 before memorizing said 3rd image data in said storage section, and was obtained on said main display.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the technique which raises the convenience at the time of photography especially about the migration terminal unit which has a photography function.
[0002]
[Description of the Prior Art] In recent years, migration terminals, such as a cellular phone, PDA (Personal Digital Assistance), etc. which have a photography function, are spreading. Image formation can be carried out to the light-receiving side of photo detectors, such as CCD (charged coupled device), with the lens which attached the light from photographic subjects, such as a person and scenery, in the body, the photographic subject image by which image formation was carried out can be changed into image data by the photo detector, by recording image data on a record medium, the migration terminal which has such a photography function photos a circumference image, and the recorded image data can be transmitted and received or it can record [it can be matched with the telephone number or a mail address, and] it.
[0003] Many of conventional migration terminals are equipped with displays, such as LCD, an actuation menu and an electronic mail can be displayed on a display, or it can reproduce the image data which a photo detector outputs, and the image data currently recorded, and can display an image. By reproducing serially the image data which a photo detector outputs on the occasion of photography, and displaying a photographic subject image on a display, a user uses the display concerned instead of a finder, and he can photo a photographic subject, checking composition.
[0004]
[Problem(s) to be Solved by the Invention] However, the display concerned may be unable to be used instead of a finder according to a lens, a display, and the physical relationship of a photographic subject. For example, he cannot be photoed at the migration terminal at which the lens and the display are prepared in the front face and the tooth back, respectively, checking his own photographic subject image.
[0005] Moreover, at the migration terminal at which the lens and the display are prepared in the same field, checking a photographic subject image, scenery etc. cannot be photoed so that he may not be reflected. Moreover, it is desirable if the scenery etc. and the them who have met themselves can be photoed checking both photographic subject images to coincidence. This invention aims at offering the migration terminal unit which can be photoed while a photography person and the person taken a photograph check a photographic subject image, and the method of presentation which displays a photography candidate's image in various situations.
[0006]
[Means for Solving the Problem] In order to attain the above-mentioned purpose, the migration terminal unit concerning this invention The 1st generation section which is the migration terminal unit which has the function which displays a photography candidate's image, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation section which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, It is characterized by having the main display which is prepared in said main actuation side side, corresponds to said 1st image data, corresponds to the 1st image and said 2nd image data of the right-and-left contrary for photography, and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's image.
[0007] In order to attain the above-mentioned purpose, the method of presentation concerning this invention The 1st generation step which is the method of presentation which displays a surrounding photography candidate's image in a migration terminal unit, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation step which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, It is characterized by including the main display step which corresponds to the main display prepared in said main actuation side side at said 1st image data, corresponds to the 1st image and said

2nd image data of the right-and-left contrary for photography, and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's image.
[0008] It is displayed without being displayed by this like [when it is going to photo to coincidence itself] the image with which its own photographic subject image was reflected to the mirror which carried out right-and-left reversal and photographic subject images', such as scenery's, carrying out right-and-left reversal by it. [who have met themselves] [the scenery etc. and the one] Therefore, while a photography person checks both photographic subject images, a photograph can be taken, and since an own photographic subject image can be further checked with the feeling which looks at a mirror every day, sense of incongruity does not arise that it is easy to make correction of a camera station etc.

[0009]
[Embodiment of the Invention] The gestalt 1 of operation of <gestalt 1 of operation> <outline> this invention Are the cellular phone which has a photography function and it has two cameras and two displays. To the main actuation side usually seen at the time of the photography in which the manual operation button was installed, one camera and display Arrange the camera and display of another side at the tooth back of the main actuation side, and its image data is incorporated with the camera installed in the main actuation side. It is the cellular phone which can ** that incorporate others' image data with the camera installed in a tooth back, display the image of oneself's and others on the display installed in the main actuation side, take a photograph while a photography person checks, and display others' image on the display installed in a tooth back, and others check.
[0010] <Configuration> drawing 1 (a) - (b) is drawing showing the appearance of the migration terminal in the gestalt 1 of operation of this invention, drawing 1 (a) is a front view and drawing 1 (b) is rear view. Drawing 1 (a) The migration terminal shown in - (b) is the cellular phone 100 in which **** is possible. In moving part, it comes to connect the 1st case and the 2nd case possible [****]. The 1st camera 101 and the Maine display 106 are arranged to the main actuation side which it is concealed in a **** condition and exposed in an expansion condition and where operating parts, such as a ten key, have been arranged, and the 2nd camera 102 and the subdisplay 107 are arranged at the tooth back of the main actuation side.
[0011] Generally, while changing into an expansion condition the cellular phone in which **** is possible at the time of the main actuation relevant to a message, and the main actuation relevant to an electronic mail at the time of a message, it is awaited and it changes it into a **** condition at the time and the time of easy specific actuation. For example, in the **** condition, after the desired call origination point is directed to a certain cellular phone out of the memorized telephone number, it has the function automatically dialed to the telephone number corresponding to the call origination point concerned by changing into an expansion condition.
[0012] Drawing 2 is drawing showing the outline of the configuration of the cellular phone in the gestalt 1 of operation of this invention. The cellular phone 100 shown in drawing 2 is equipped with the 1st camera 101, the 2nd camera 102, the 1st image-processing section 103, the 2nd image-processing section 104, a control section 105, the Maine display 106, the subdisplay 107, the storage section 108, the ten key section 109, the actuation key section 110, the transceiver section 111, the timer section 112, the power feed zone 113, the voice input section 114, and the voice output section 115.
[0013] The 1st camera 101 has photo detectors and lenses, such as CCD and the C-MOS artificial retina IC, is formed in the location which can check the Maine display 106 by looking, carries out image formation of the photographic subject image to the light-receiving side of a photo detector with a lens, changes a photographic subject image into a picture signal by the photo detector, and outputs. The 2nd camera 102 has photo detectors and lenses, such as CCD and the C-MOS artificial retina IC, like the 1st camera 101, is formed in the location which can check the subdisplay 107 by looking, carries out image formation of the photographic subject image to the light-receiving side of a photo detector with a lens, changes a photographic subject image into a picture signal by the photo detector, and outputs.
[0014] The 1st image-processing section 103 has an AD translation circuit and the memory for storing data temporarily, carries out the AD translation of the picture signal outputted with the 1st camera 101, performs further predetermined data conversion, generates the image data changed into the data format suitable for a cellular phone 100, and outputs it to a control section 105. The 2nd image-processing section 104 has an AD translation circuit and the memory for storing data temporarily like the 1st image-processing section 103, carries out the AD translation of the picture signal outputted with the 2nd camera 102, performs further predetermined data conversion, generates the image data changed into the data format suitable for a cellular phone 100, and outputs it to a control section 105.
[0015] A control section 105 has DSP (Digital Signal Processor) which controls radio processing, an image processing, etc., receives various directions through the ten key section 109 and actuation key section 110 grade from a user, and controls other components that the directions concerned should be carried out. For example, when directions of the photography preparation with the 1st camera 101 are made from a user, it is made to energize and stand by for the 1st camera 101, the image data outputted from the 1st image-processing section 103 is reproduced, and the image of the

direction the Maine display 106 appears is displayed on the Maine display 106. Here, since the image displayed on the Maine display 106 is used in order for the photography person itself to mainly check his projection condition, it may display a mirror image.

[0016] A mirror image is an image which reverses right and left of the usual image concerned, and is obtained to the usual image obtained when a photography person photos a person and scenery here. For example, when O.K. sign is taken out with the right hand and a mirror is seen, it seems to have taken out O.K. sign with the left hand, but in displaying oneself as a photographic subject, there is [a direction of a mirror image] no sense of incongruity. [who is a photography person] Moreover, a non-mirror image means the usual image concerned.

[0017] Drawing 3 (a) is drawing showing a photography person's image which should be photoed during standby of the 1st camera 101. Drawing 3 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image was displayed during standby of the 1st camera 101. In displaying a photography person's mirror image on the Maine display 106, since a photography person can check an image with the feeling which looks at a mirror every day, sense of incongruity does not produce him.

[0018] Moreover, when directions of the photography preparation with the 2nd camera 102 are made from a user, it is made to energize and stand by for the 2nd camera 102, the image data outputted from the 2nd image-processing section 104 is reproduced, and the image of the direction the subdisplay 107 appears is displayed on the Maine display 106 and the subdisplay 107, for example. Since the image which displays a non-mirror image since the image displayed on the Maine display 106 is used here in order that a photography person may mainly check the projection condition of photographic subjects other than himself, and is displayed on the subdisplay 107 is used in order that the person who is a photographic subject taken a photograph may check his projection condition, it may display a mirror image.

[0019] Drawing 4 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed during standby of the 2nd camera 102. Drawing 4 (b) is drawing showing the example of the Maine display 106 on which the non-mirror image of the person taken a photograph was displayed during standby of the 2nd camera 102. In displaying the mirror image of the person taken a photograph on the subdisplay 107, since the person taken a photograph can check an image with the feeling which looks at a mirror every day, sense of incongruity does not produce him.

[0020] Moreover, from a user, when [of the 1st camera 101 and the 2nd camera 102] directions of the photography preparation by both are made Make it energize and stand by for the 1st camera 101 and the 2nd camera 102, and the image data outputted from the 1st image-processing section 103 and the image data outputted from the 2nd image-processing section 104 are reproduced. Both images are displayed on the Maine display 106, and the image of the direction the subdisplay 107 appears is displayed on the subdisplay 107. The image displayed on the Maine display 106 here Since it is used in order that a photography person may mainly check the projection condition of photographic subjects other than himself, [oneself and] The image which the near image with which he is reflected displays a mirror image, and the near image with which photographic subjects other than themselveses are reflected displays a non-mirror image, and is displayed on the subdisplay 107 Since it is used in order that the person who is a photographic subject taken a photograph may check his projection condition, a mirror image may be displayed.

[0021] Drawing 5 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed during standby of the 1st camera 101 and the 2nd camera 102. Drawing 5 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image and the non-mirror image of the person taken a photograph were displayed during standby of the 1st camera 101 and the 2nd camera 102.

[0022] In displaying a photography person's mirror image on the Maine display 106 and displaying the mirror image of the person taken a photograph on the subdisplay 107, since a photography person and the person taken a photograph can check an image with the feeling which looks at a mirror every day, sense of incongruity does not produce them.

The Maine display 106 has display devices, such as LCD and an organic electroluminescence (Electro Luminescence) display panel, is prepared in the location which can be referred to in case a user performs operator guidance by the ten key section 109 or the actuation key section 110, and displays an image and an alphabetic character on a screen based on image data, alphabetic data, etc. which were received from the control section 105.

[0023] The subdisplay 107 has display devices, such as LCD and an organic electroluminescence display panel, like the Maine display 106, is prepared in the tooth back of the Maine display 106, and displays an image and an alphabetic character on a screen based on the image data and alphabetic data which were received from the control section 105.

The storage section 108 has non-volatile record media, such as a flash memory, and records arrival-of-the-mail hysteresis, a telephone directory, image data, various setup, etc.

[0024] For example, the storage section 108 carries out reception record of the image data from a control section 105, when directions of photography are made from a user. The ten key section 109 has a carbon button for inputting a number, an alphabetic character, etc., and receives the input of the telephone number, E-mail, etc. from a user. The

actuation key section 110 has a carbon button, a jog key, etc. for inputting various directions of operation etc., and receives photography of an image, transmission and reception of e-mail, ON/OFF of a power source, ON / which off-hook directions from a user.
[0025] The transceiver section 111 has an antenna, **********, an amplifying circuit, etc., and transmits and receives data, such as voice, an image, and an alphabetic character. The timer section 112 manages time information, and the power feed zone 113 which outputs time information based on the directions from a control section 105 is based on directions from a control section 105, and has the function to supply and stop power to each component.
[0026] The voice input section 114 has a ceramic microphone etc., changes voice into an electrical signal, and outputs it to a control section 105. The voice output section 115 is SERAMITSU. It has KUSUPIKA etc. and the electrical signal outputted from a control section 105 is changed into voice. In addition, about general processing of cellular phones, such as radio processing, since it is the same as usual, detailed explanation is omitted.
[0027] Drawing 6 <of operation> is drawing showing the outline of the photography actuation which the migration terminal in the gestalt 1 of operation of this invention performs. Drawing 6 is used for below and the outline of photography actuation is explained to it.
(1) The actuation key section 110 receives a certain directions from a user (step S1).
[0028] (2) Judge whether the directions with which the control section 105 was received are "preparation which photos itself" (step S2).
(3) Judge whether the directions with which the control section 105 was received are "preparation which takes a photograph except itself" (step S3).
(4) Judge whether the directions with which the control section 105 was received are "preparation which takes a photograph except itself to coincidence" (step S4). [oneself and]
[0029] (5) the case where control sections 105 are directions of other processings in which the received directions are not the things about preparation of photography -- being concerned -- others -- control to perform processing (step S5).
(6) When the received directions are "preparation which photos itself with the 1st camera", a control section 105 makes the 1st camera 101 stand by, reproduces the image data outputted from the 1st image-processing section 103, and displays an image on the Maine display 106 (step S6).
[0030] (7) When the received directions are "preparation which takes a photograph except itself with the 2nd camera", a control section 105 makes the 2nd camera 102 stand by, reproduces the image data outputted from the 2nd image-processing section 104, and displays an image on the Maine display 106 and the subdisplay 107 (step S7).
(8) When the received directions are "preparation which photos itself except itself to coincidence with the 2nd camera with the 1st camera" A control section 105 makes both the 1st camera 101 and the 2nd camera 102 stand by, and the image data outputted from the 1st image-processing section 103 and the image data outputted from the 2nd image-processing section 104 are reproduced. Both images are displayed on the Maine display 106, and the image of the direction the subdisplay 107 appears is displayed on the subdisplay 107 (step S8).
[0031] (9) Receive the directions which end the preparation photoed from a user (step S9).
(10) Receive the directions photoed from a user (step S10).
(11) Carry out [that a photography key is pressed etc. and] and a control section 105 stores image data in a reception beam case for the directions photoed from a user at the storage section 108 (step S11).
[0032] As mentioned above, according to the gestalt 1 of operation of this invention, a photograph can be taken, while others can be photoed with the camera which installed itself in the tooth back, the photographic subject image under photography preparation is displayed on the display installed in the main actuation side, and the display installed in a tooth back and the both sides of a photography person and the person taken a photograph check a photographic subject image with the camera installed in the main actuation side.
The gestalt 2 of operation of <gestalt 2 of operation> <outline> this invention It is the cellular phone of the **** type which has a photography function. To the cellular phone of the gestalt 1 of operation Have the function to detect a **** condition or an expansion condition furthermore, and, in the case of an expansion condition, it operates like the gestalt 1 of operation. It is the cellular phone which made it possible to take a photograph, displaying and checking an image on the display which incorporated image data with the camera installed in a tooth back in the case of the **** condition, and was installed in the main actuation side.
[0033] <Configuration> drawing 7 is drawing showing the outline of the configuration of the cellular phone in the gestalt 2 of operation of this invention. The cellular phone 200 shown in drawing 7 is equipped with a detecting element 201, the 1st camera 101, the 2nd camera 102, the 1st image-processing section 103, the 2nd image-processing section 104, a control section 202, the Maine display 106, the subdisplay 107, the storage section 108, the ten key section 109, the actuation key section 110, the transceiver section 111, the timer section 112, the power feed zone 113, the voice input section 114, and the voice output section 115.
[0034] Here, the same number is given to a component equipped with the same function as the gestalt 1 of operation,

and the explanation is omitted. A detecting element 201 detects whether it is in a **** condition, or it is in an expansion condition. A control section 202 has DSP which controls radio processing, an image processing, etc. like a control section 105, receives various directions through the ten key section 109 and actuation key section 110 grade from a user, and controls other components that the directions concerned should be carried out according to the detection result by the detecting element 201.

[0035] For example, when directions of photography preparation are made from a user, it detects whether a detecting element 202 is in a **** condition first, or it is in an expansion condition. Next, when it is detected that it is in a **** condition, a control section 202 makes it energize and stand by for the 2nd camera 102, the image data outputted from the 2nd image-processing section 104 is reproduced, and the image of the direction the subdisplay 107 appears is displayed on the subdisplay 107. Here, since the image displayed on the subdisplay 107 is used in order for the photography person itself to mainly check his projection condition, it may display a mirror image.

[0036] Moreover, when it is detected that it is in an expansion condition, a control section 202 makes it energize and stand by for the 1st camera 101 and the 2nd camera 102, the image data outputted from the 1st image-processing section 103 and the image data outputted from the 2nd image-processing section 104 are reproduced, both images are displayed on the Maine display 106, and the image of the direction the subdisplay 107 appears is displayed on the subdisplay 107. The image displayed on the Maine display 106 here Since it is used in order that a photography operator may mainly check the projection condition of photographic subjects other than himself, [oneself and] The image which the near image with which he is reflected displays a mirror image, and the near image with which photographic subjects other than themselves are reflected displays a non-mirror image, and is displayed on the subdisplay 107 Since it is used in order that the person who is a photographic subject taken a photograph may check his projection condition, a mirror image may be displayed.

[0037] Drawing 8 (a) is drawing showing a photography person's image which should be photoed, when it is detected that it is in a **** condition. drawing 8 (b) is drawing showing the example of the subdisplay 107 on which it was alike when it was detected that it is in a **** condition, and a photography person's own mirror image was displayed. Drawing 9 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed, when it is detected that it is in an expansion condition.

[0038] Drawing 9 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image and the non-mirror image of the person taken a photograph were displayed, when it is detected that it is in an expansion condition. In displaying a photography person's mirror image on the Maine display 106 and displaying the mirror image of a photography person or the person taken a photograph on the subdisplay 107, since a photography person and the person taken a photograph can check an image with the feeling which looks at a mirror every day, sense of incongruity does not produce them.

[0039] Drawing 10 <of operation> is drawing showing the outline of the photography actuation which the migration terminal in the gestalt 2 of operation of this invention performs. Drawing 10 is used for below and the outline of photography actuation is explained to it.

(1) The actuation key section 110 receives directions of photography preparation from a user (step S21).

[0040] (2) A detecting element 201 detects whether it is in a **** condition, or it is in an expansion condition (step S22).

(3) When it is detected that it is in a **** condition, a control section 202 makes the 2nd camera 102 stand by, reproduces the image data outputted from the 2nd image-processing section 104, and displays an image on the subdisplay 107 (step S23).

[0041] (4) When it is detected that it is in an expansion condition, a control section 202 makes the 1st camera 101 and the 2nd camera 102 stand by, reproduces the image data outputted from the 1st image-processing section 103, and the image data outputted from the 2nd image-processing section 104, display both images on the Maine display 106, and display on the subdisplay 107 the image of the direction the subdisplay 107 appears (step S24).

[0042] (5) Receive the directions which end the preparation photoed from a user (step S25).

(6) Receive the directions photoed from a user (step S26).

(7) Carry out [that a photography key is pressed etc. and] and a control section 202 stores image data in a reception beam case for the directions photoed from a user at the storage section 108 (step S27).

[0043] As mentioned above, it responds [of operation of this invention] to whether it is in whether if it depends, it will be in a **** condition, and an expansion condition gestalt 2. Can photo others with the camera which installed itself in the tooth back, and the photographic subject image under photography preparation is expressed on the display installed in an actuation side, and the display installed in a tooth back as the camera installed in an actuation side. A photograph can be taken while the both sides of a photography operator and the person taken a photograph check a photographic subject image.

[0044] In addition, although it displays both images on the Maine display 106 like the above with the camera installed

in the main actuation side in photoing scenery etc. to coincidence with the camera which installed itself in the tooth back, you may make it not display an image on the subdisplay 107. Moreover, when directions of the coincidence photography with the 1st camera and the 2nd camera are received from a user, the 1st image under photography is a mirror image with the 1st camera, and the 2nd image under photography is a non-mirror image with the 2nd camera, and you may display on the main display at coincidence.

[0045] Moreover, when the 1st image of an account and the 2nd image are being displayed on the main display at coincidence, the 2nd image may be expressed to a subdisplay as a mirror image. Moreover, when the 1st image and the 2nd image are being displayed on the main display at coincidence and image data storage directions are received, the 3rd image data which compounds the 1st image and the 2nd image and is obtained may be memorized in the storage section.

[0046] Moreover, when compounding the 1st image and the 2nd image, the 1st image currently displayed by the mirror image may be used as a non-mirror image, and may be compounded. Moreover, before memorizing the 3rd image data in the storage section, the 3rd image which compounded said 1st image and said 2nd image, and was obtained may be displayed on the main display. Moreover, when displaying the 3rd image on the main display, you may display in the condition which can be edited.

[0047] Moreover, when displaying in the condition that the 3rd image can be edited, the 1st image and the 2nd image may be displayed selectable separately. Moreover, when displaying in the condition that the 3rd image can be edited, the 1st image and the 2nd image may be chosen separately, and may be displayed possible. Moreover, the program which can make a computer perform actuation like the gestalten 1 and 2 of this operation is recorded on the record medium in which computer reading is possible, this record medium circulates, and it can be set as the object of dealings. Moreover, the program concerned circulates through a network etc. and can be set as the object of dealings.

[0048] The record media in which computer reading is possible are fixed record media, such as removable record media, such as for example, a floppy (trademark) disk, CD, MO and DVD, and a memory card, and a hard disk, and semiconductor memory, etc., and it is not limited especially here.

[0049]

[Effect of the Invention] The 1st generation section which the migration terminal unit concerning this invention is a migration terminal unit which has the function which displays a photography candidate's image, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation section which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, It is characterized by having the main display which is prepared in said main actuation side side, corresponds to said 1st image data, corresponds to the 1st image and said 2nd image data of the right-and-left contrary for photography, and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's image.

[0050] The 1st generation step which the method of presentation concerning this invention is the method of presentation which displays a surrounding photography candidate's image in a migration terminal unit, and generates the 1st image data by making the main actuation side side applicable to photography, The 2nd generation step which generates the 2nd image data by making the tooth-back side of said main actuation side applicable to photography, It is characterized by including the main display step which corresponds to the main display prepared in said main actuation side side at said 1st image data, corresponds to the 1st image and said 2nd image data of the right-and-left contrary for photography, and displays on coincidence both 2nd image which is not the right-and-left contrary for photography as a photography candidate's image.

[0051] It is displayed without being displayed by this like [when it is going to photo to coincidence itself] the image with which its own photographic subject image was reflected to the mirror which carried out right-and-left reversal and photographic subject images', such as scenery's, carrying out right-and-left reversal by it. [who have met themselves] [the scenery etc. and the one] Therefore, while a photography person checks both photographic subject images, a photograph can be taken, and since an own photographic subject image can be further checked with the feeling which looks at a mirror every day, sense of incongruity does not arise that it is easy to make correction of a camera station etc.

[0052] Moreover, it can also carry out that said migration terminal unit is further equipped with the photography directions receptionist section which receives the photography directions from an operator, and a record means to complete photography by recording without carrying out both said 1st image data and said 2nd image data reversely [right-and-left] for photography, if said photography directions are received as the description. If photography directions are received, both the 1st image data and the 2nd image data are recordable as it is with this.

[0053] Moreover, said migration terminal unit can also be characterized by having the subdisplay which is prepared in said tooth-back side, corresponds to said 2nd image data further, and displays the 3rd image of the right-and-left contrary for photography. When it is going to photo to coincidence itself by this, the photographic subject image of the

person who has met is displayed on a subdisplay like the image reflected to the mirror which carried out right-and-left reversal. [who have met themselves] [the person and the one]
[0054] Therefore, since the person who has met can check an own photographic subject image with the feeling which looks at a mirror every day, sense of incongruity does not arise that it is easy to make correction of a camera station etc. Moreover, said migration terminal unit is a closing motion type, and a closed state and an open condition exist. Said main actuation side is concealed in a closed state, and is exposed in an open condition, and said tooth back is exposed irrespective of a closed state and an open condition. Said migration terminal unit Furthermore, the preparation directions receptionist section which receives directions of the photography preparation from an operator, It has a detection means to detect whether it is a closed state when directions of said photography preparation are received, or it is in an open condition. Said 1st generation section does not generate said 1st image data, when it is detected that it is a closed state, but when it is detected that it is in an open condition, it generates said 1st image data. Said 2nd generation section will generate said 2nd image data irrespective of a closed state and an open condition, if directions of said photography preparation are received. Said main display does not display a photography candidate's image, when it is detected that it is a closed state, but when it is detected that it is in an open condition, it displays both said 1st image and said 2nd image. Said migration terminal unit can also be characterized by having the subdisplay which is prepared in said tooth-back side, corresponds to said 2nd image data further when it is detected that it is a closed state, and displays the 3rd image of the right-and-left contrary for photography.
[0055] If directions of photography preparation are received by this, when it is a closed state, the 2nd image data will be generated by the 2nd generation section. Are displayed like the image reflected to the mirror in which the photographic subject image carried out right-and-left reversal by the subdisplay, and in being in an open condition The 1st image data is generated by the 1st generation section, the 2nd image data is generated by the 2nd generation section, and it is displayed like the image reflected to the mirror in which its own photographic subject image carried out right-and-left reversal by the main display, and it is displayed without photographic subject images', such as scenery's, carrying out right-and-left reversal.
[0056] Moreover, the photography directions receptionist section in which said migration terminal unit receives the photography directions from an operator further after directions of said photography preparation are made, [when said photography directions were received and it is detected that it is a closed state] [when it is detected that it is in a record dehiscence condition without setting said 2nd image data reversely / right-and-left / as for photography] It can also be characterized by having a record means to complete photography by recording without carrying out both said 1st image data and said 2nd image data reversely [right-and-left] for photography.
[0057] By this, if photography directions are received, when it is a closed state, the 2nd image data can be recorded as it is, and when it is in an open condition, both the 1st image data and the 2nd image data can be recorded as it is. Moreover, in a migration terminal unit, said subdisplay can also be characterized by displaying said 3rd image irrespective of an open condition and an open condition, if directions of said photography preparation are received.
[0058] Directions of photography preparation are received by this, and when it is in an open condition, it is displayed like the image reflected to the mirror in which the photographic subject image carried out right-and-left reversal by the subdisplay. While the main display and the 1st camera are formed in the main actuation side side, the migration terminal unit concerning this invention The 2nd camera is formed in the tooth-back side of the main actuation side, and it is the migration terminal unit which can be displayed on said main display about the image under photography with said 1st camera and said 2nd camera. The control means which controls the display of said image is provided. Said control means When directions of the coincidence photography with said 1st camera and said 2nd camera are received, it is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence. Moreover, a subdisplay can be provided in said tooth-back side, and it can also be characterized by said control means expressing said 2nd image to said subdisplay as a mirror image, when said 1st image and said 2nd image are displayed on said main display at coincidence. Moreover, when the storage section which memorizes the image data of said image is provided, said control means shows said 1st image and said 2nd image to said main display at coincidence and image data storage directions are received, it can also be characterized by memorizing the 3rd image data which compounds said 1st image and said 2nd image, and is obtained in said storage section. Moreover, said control means can also be characterized by using as a non-mirror image said 1st image currently displayed by the mirror image, and compounding it, when compounding said 1st image and said 2nd image. Moreover, before said control means memorizes said 3rd image data in said storage section, it can also be characterized by displaying the 3rd image which compounded said 1st image and said 2nd image, and was obtained on said main display. Moreover, said control means can also be characterized by what is displayed in the condition which can be edited, when displaying said 3rd image on said main display. Moreover, said control means can also be characterized by displaying separately said 1st image and said 2nd image selectable, when displaying in the condition that said 3rd image can be edited. Moreover, said control

means can also be characterized by choosing separately said 1st image and said 2nd image, and displaying them possible, when displaying in the condition that said 3rd image can be edited.
[0059] While the main display and the 1st camera are formed in the main actuation side side, the display-control approach concerning this invention The 2nd camera is formed in the tooth-back side of the main actuation side, and it is the display-control approach of the migration terminal unit which can be displayed on said main display about the image under photography with said 1st camera and said 2nd camera. The control step which controls the display of said image is included. Said control step When directions of the coincidence photography with said 1st camera and said 2nd camera are received, it is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence. Moreover, said control step can also be characterized by what is displayed on the subdisplay which possesses said 2nd image in the tooth-back side of said migration terminal unit by the mirror image, when said 1st image and said 2nd image are displayed on said main display at coincidence. Moreover, said control step can also be characterized by memorizing the 3rd image data which compounds said 1st image and said 2nd image, and is obtained in the storage section, when said 1st image and said 2nd image are displayed on said main display at coincidence and image data storage directions are received. Moreover, said control step can also be characterized by using as a non-mirror image said 1st image currently displayed by the mirror image, and compounding it, when compounding said 1st image and said 2nd image. Moreover, before said control step memorizes said 3rd image data in said storage section, it can also be characterized by displaying the 3rd image which compounded said 1st image and said 2nd image, and was obtained on said main display.
[0060] It is displayed without being displayed by this like [when it is going to photo to coincidence itself] the image with which its own photographic subject image was reflected to the mirror which carried out right-and-left reversal and photographic subject images', such as scenery's, carrying out right-and-left reversal by it. [who have met themselves] [the scenery etc. and the one] Therefore, while a photography person checks both photographic subject images, a photograph can be taken, and since an own photographic subject image can be further checked with the feeling which looks at a mirror every day, sense of incongruity does not arise that it is easy to make correction of a camera station etc.

[0061] The display-control program concerning this invention is a display-control program which makes a migration terminal unit perform display-control procedure. Said migration terminal unit While the main display and the 1st camera are formed in the main actuation side side, the 2nd camera is formed in the tooth-back side of the main actuation side. The image under photography can be expressed to said main display as said 1st camera and said 2nd camera. Said display-control procedure The control procedure which controls the display of said image is included. Said control procedure When directions of the coincidence photography with said 1st camera and said 2nd camera are received, it is a mirror image about the 1st image under photography with said 1st camera, and is characterized by displaying the 2nd image under photography on said main display by the non-mirror image with said 2nd camera at coincidence. Moreover, said control procedure can also be characterized by what is displayed on the subdisplay which possesses said 2nd image in the tooth-back side of said migration terminal unit by the mirror image, when said 1st image and said 2nd image are displayed on said main display at coincidence. Moreover, said control procedure can also be characterized by memorizing the 3rd image data which compounds said 1st image and said 2nd image, and is obtained in the storage section, when said 1st image and said 2nd image are displayed on said main display at coincidence and image data storage directions are received. Moreover, said control procedure can also be characterized by using as a non-mirror image said 1st image currently displayed by the mirror image, and compounding it, when compounding said 1st image and said 2nd image. Moreover, before said control procedure memorizes said 3rd image data in said storage section, it can also be characterized by displaying the 3rd image which compounded said 1st image and said 2nd image, and was obtained on said main display.
[0062] It is displayed without being displayed by this like [when it is going to photo to coincidence itself] the image with which its own photographic subject image was reflected to the mirror which carried out right-and-left reversal and photographic subject images', such as scenery's, carrying out right-and-left reversal by it. [who have met themselves] [the scenery etc. and the one] Therefore, while a photography person checks both photographic subject images, a photograph can be taken, and since an own photographic subject image can be further checked with the feeling which looks at a mirror every day, sense of incongruity does not arise that it is easy to make correction of a camera station etc.

[Translation done.]

DESCRIPTION OF DRAWINGS

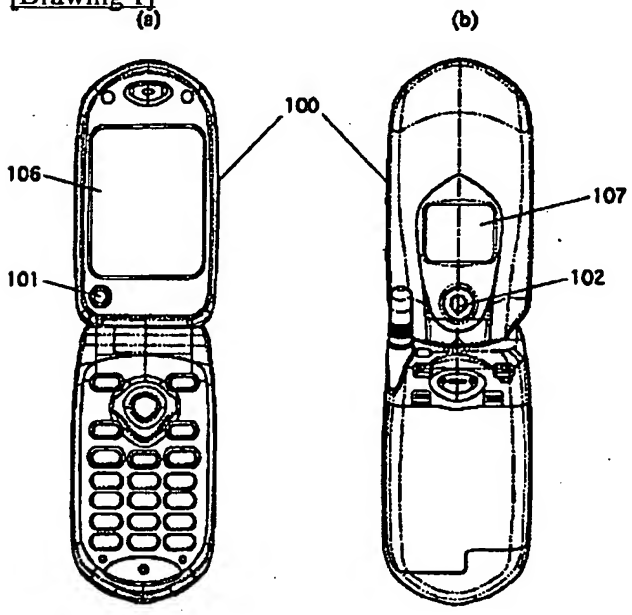
[Brief Description of the Drawings]
[Drawing 1] Drawing 1 (a) - (b) is drawing showing the appearance of the migration terminal in the gestalt 1 of operation of this invention, drawing 1 (a) is a front view and drawing 1 (b) is rear view.
[Drawing 2] Drawing 2 is drawing showing the outline of the configuration of the cellular phone in the gestalt 1 of operation of this invention.
[Drawing 3] Drawing 3 (a) is drawing showing a photography person's image which should be photoed during standby of the 1st camera 101. Drawing 3 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image was displayed during standby of the 1st camera 101.
[Drawing 4] Drawing 4 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed during standby of the 2nd camera 102. Drawing 4 (b) is drawing showing the example of the Maine display 106 on which the non-mirror image of the person taken a photograph was displayed during standby of the 2nd camera 102.
[Drawing 5] Drawing 5 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed during standby of the 1st camera 101 and the 2nd camera 102. Drawing 5 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image and the non-mirror image of the person taken a photograph were displayed during standby of the 1st camera 101 and the 2nd camera 102.
[Drawing 6] Drawing 6 is drawing showing the outline of the photography actuation which the migration terminal in the gestalt 1 of operation of this invention performs.
[Drawing 7] Drawing 7 is drawing showing the outline of the configuration of the cellular phone in the gestalt 2 of operation of this invention.
[Drawing 8] Drawing 8 (a) is drawing showing a photography person's image which should be photoed, when it is detected that it is in a **** condition. drawing 8 (b) is drawing showing the example of the subdisplay 107 on which it was alike when it was detected that it is in a **** condition, and a photography person's own mirror image was displayed.
[Drawing 9] Drawing 9 (a) is drawing showing the example of the subdisplay 107 on which the mirror image of the person taken a photograph was displayed, when it is detected that it is in an expansion condition. Drawing 9 (b) is drawing showing the example of the Maine display 106 on which a photography person's own mirror image and the non-mirror image of the person taken a photograph were displayed, when it is detected that it is in an expansion condition.
[Drawing 10] Drawing 10 is drawing showing the outline of the photography actuation which the migration terminal in the gestalt 2 of operation of this invention performs.
[Description of Notations]
100 Cellular Phone
101 1st Camera
102 2nd Camera
103 1st Image-Processing Section
104 2nd Image-Processing Section
105 Control Section
106 Maine Display
107 SubDisplay
108 Storage Section
109 Ten Key Section
110 Actuation Key Section

111 Transceiver Section
112 Timer Section
113 Power Feed Zone
114 Voice Input Section
115 Voice Output Section
201 Detecting Element
202 Control Section

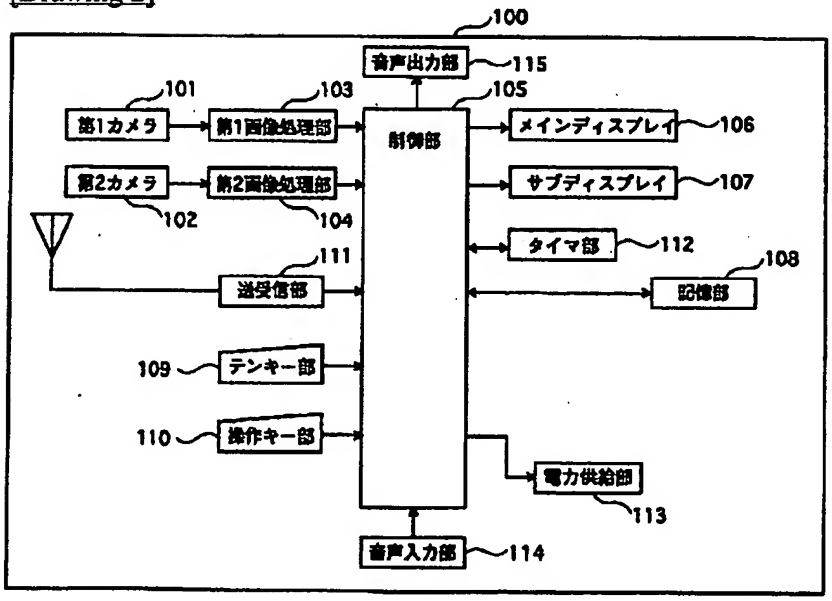
[Translation done.]

DRAWINGS

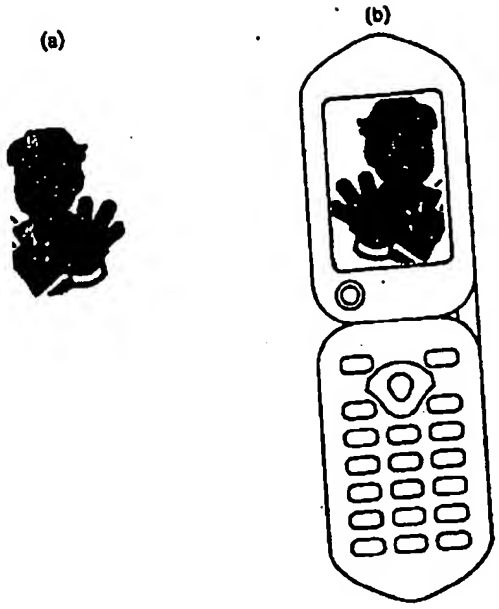
[Drawing 1]



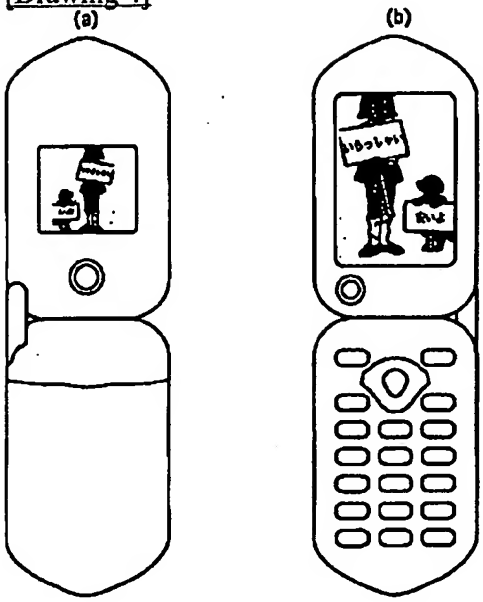
[Drawing 2]



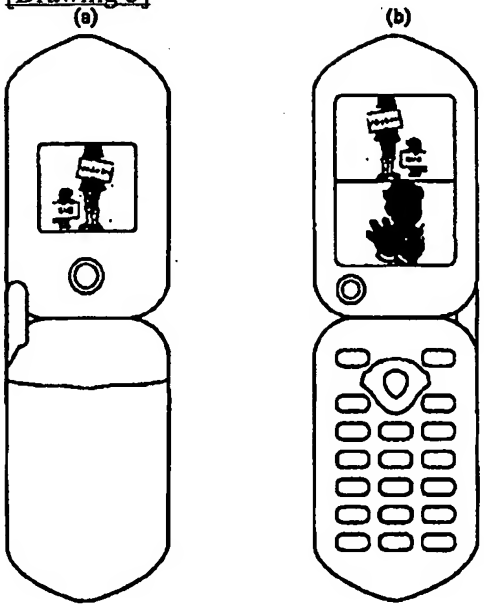
[Drawing 3]



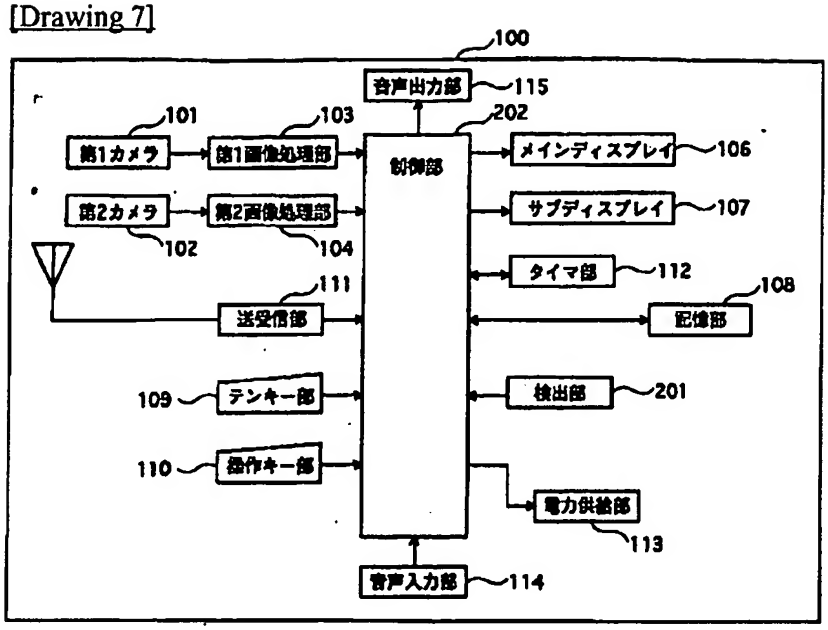
[Drawing 4]



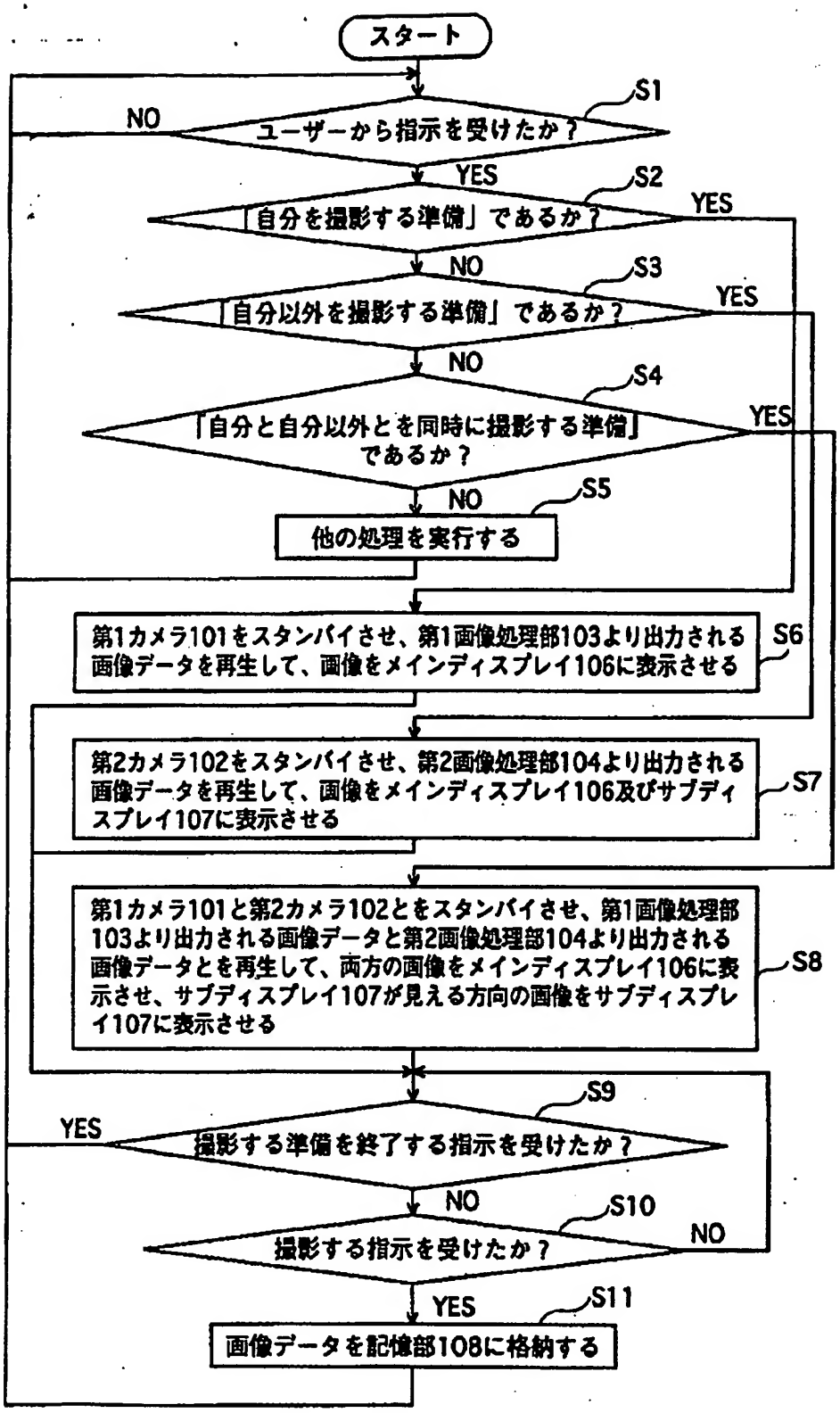
[Drawing 5]



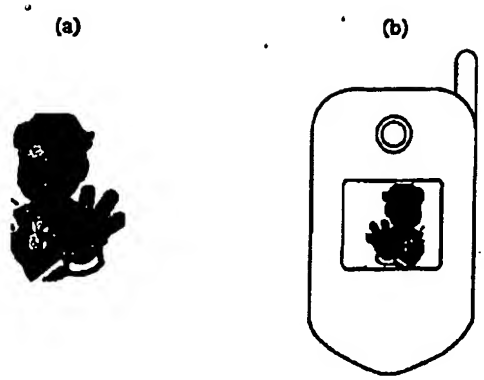
[Drawing 7]



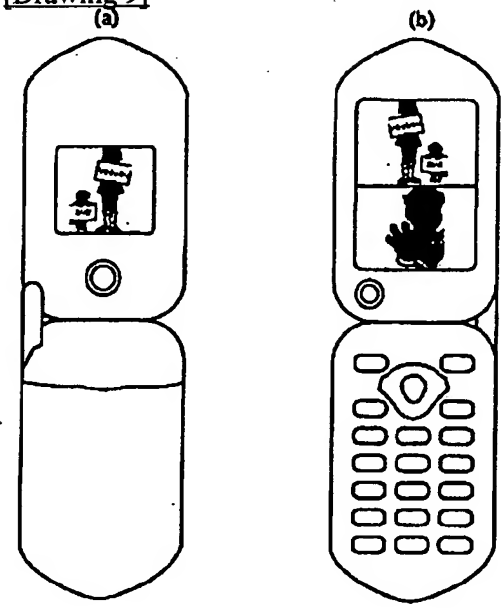
[Drawing 6]


スタート
S1
NO
ユーザーから指示を受けたか？
YES
S2
「自分を撮影する準備」であるか？
YES
NO
S3
「自分以外を撮影する準備」であるか？
YES
NO
S4
「自分と自分以外とを同時に撮影する準備」であるか？
YES
NO
S5
他の処理を実行する
第1カメラ101をスタンバイさせ、第1画像処理部103より出力される画像データを再生して、画像をメインディスプレイ106に表示させる
S6
第2カメラ102をスタンバイさせ、第2画像処理部104より出力される画像データを再生して、画像をメインディスプレイ106及びサブディスプレイ107に表示させる
S7
第1カメラ101と第2カメラ102とをスタンバイさせ、第1画像処理部103より出力される画像データと第2画像処理部104より出力される画像データとを再生して、両方の画像をメインディスプレイ106に表示させ、サブディスプレイ107が見える方向の画像をサブディスプレイ107に表示させる
S8
S9
YES
撮影する準備を終了する指示を受けたか？
NO
S10
撮影する指示を受けたか？
NO
YES
S11
画像データを記憶部108に格納する

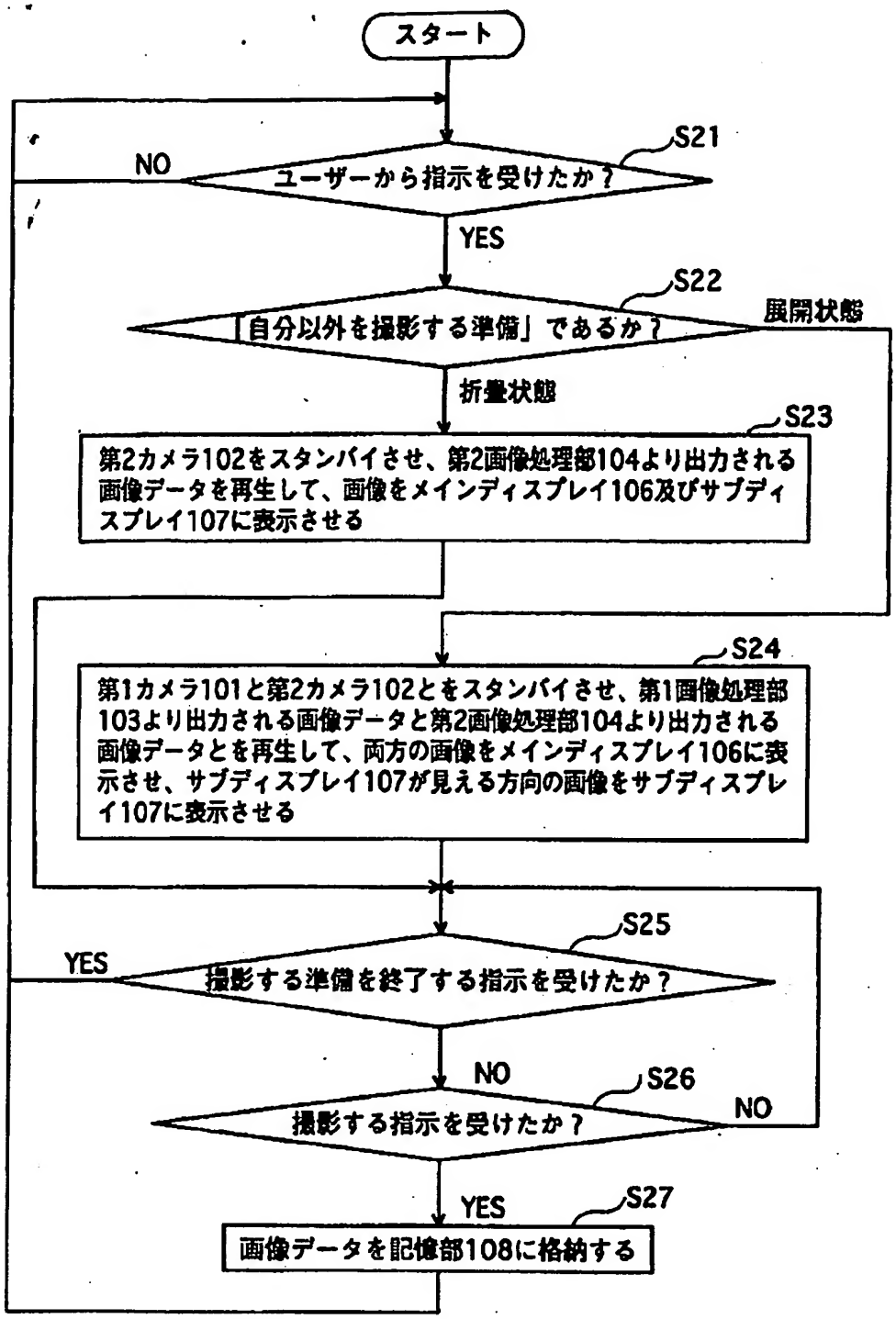
[Drawing 8]



[Drawing 9]



[Drawing 10]



[Translation done.]